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<110> Evolutionary Genomics LLC

<120> Development of Therapeutics for the Treatment of
Endotoxin-Mediated Diseases

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<150> 10/100,422

<151> 2002-03-18

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<170> PatentIn version 3.2

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Asn Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu	35	40	45	
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Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Xaa Gly Val Ala Ile Ala	
675 680 685	
gcc aac atc atc cat gaa ggt ttc cat aaa agc cga aag gtg att gtt	2112
Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val	
690 695 700	
gtg gtg tcc cag cac ttc atc cag agc cgc tgg tgt atc ttt gag tat	2160
Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr	
705 710 715 720	
gag att gct cag acc tgg cag ttt ctg agc agt cat gct ggg atc atc	2208
Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser His Ala Gly Ile Ile	
725 730 735	
ttc att gtc ctg cag aag gtg gag aag acc ctg ctc agg cag cag gtg	2256
Phe Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Gln Gln Val	
740 745 750	
gag ctg tac cgc ctt ctc agc agg aac act tac ctg gag tgg gag gat	2304
Glu Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp	
755 760 765	
agt gtc ctg ggg cgg cac att ttc tgg aga cga ctc aga aaa gcc ctg	2352
Ser Val Leu Gly Arg His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu	
770 775 780	
ctg gat ggt aaa tca tgg aat cca gaa gga aca gtg ggt aca gga tgc	2400
Leu Asp Gly Lys Ser Trp Asn Pro Glu Gly Thr Val Gly Thr Gly Cys	
785 790 795 800	
aat tag	2406
Asn	

<210> 9

<211> 801

<212> PRT

<213> Hylobates lar

<220>

<221> misc_feature

<222> (198)..(198)

<223> The 'Xaa' at location 198 stands for Arg, or His.

<220>

<221> misc_feature

<222> (683)..(683)

<223> The 'Xaa' at location 683 stands for Pro.

<400> 9

Val Val Pro Asn Ile Thr Tyr Gln Cys Met Glu Leu Asn Phe Tyr Lys
1 5 10 15

Ile Pro Asp Asn Leu Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe
 20 25 30
 Asn Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu
 35 40 45
 Leu Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp
 50 55 60
 Gly Ala Tyr Gln Ser Leu Ser Leu Leu Ser Thr Leu Ile Leu Thr Gly
 65 70 75 80
 Asn Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser
 85 90 95
 Leu Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn
 100 105 110
 Phe Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His
 115 120 125
 Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr
 130 135 140
 Asn Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Ser Ile Tyr
 145 150 155 160
 Cys Lys Asp Leu Gln Val Leu His Gln Met Pro Leu Leu Asn Leu Ser
 165 170 175
 Leu Asp Leu Ser Leu Asn Pro Met Asn Phe Ile Gln Pro Gly Ala Phe
 180 185 190
 Lys Glu Ile Ser Leu Xaa Lys Leu Thr Leu Arg Asn Asn Phe Asp Ser
 195 200 205
 Leu Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val
 210 215 220
 His Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Gly Asn Leu Glu Glu
 225 230 235 240
 Phe Asp Lys Ser Ala Leu Glu Gly Leu Cys Asn Leu Thr Ile Glu Glu
 245 250 255

Phe Arg Leu Ala Tyr Leu Asp His Tyr Leu Asp Asp Ile Ile Asp Leu
260 265 270

Phe Asn Cys Leu Ala Asn Val Ser Ser Phe Ser Leu Val Ser Val Thr
275 280 285

Ile Lys Arg Val Glu Asp Phe Ser Tyr Asn Phe Gly Trp Gln His Leu
290 295 300

Glu Leu Val Asn Cys Lys Phe Gly Gln Phe Pro Thr Leu Asn Leu Lys
305 310 315 320

Ser Leu Lys Arg Leu Thr Phe Thr Ala Asn Arg Gly Gly Asn Ala Phe
325 330 335

Ser Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn
340 345 350

Gly Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Asn
355 360 365

Ser Leu Lys Tyr Leu Asp Leu Ser Phe Asn Asp Val Ile Thr Met Ser
370 375 380

Ser Asn Phe Leu Gly Leu Glu Gln Leu Glu His Leu Asp Leu Gln His
385 390 395 400

Ser Asn Leu Lys Gln Met Ser Glu Phe Ser Val Phe Leu Ser Leu Arg
405 410 415

Asn Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Arg Val Ala Phe
420 425 430

Asn Gly Ile Phe Asn Gly Leu Ser Asn Leu Glu Val Leu Lys Met Ala
435 440 445

Gly Asn Ser Phe Gln Glu Asn Phe Leu Pro Asp Ile Phe Thr Glu Leu
450 455 460

Arg Asn Leu Thr Phe Leu Asp Leu Ser Gln Cys Gln Leu Glu Gln Leu
465 470 475 480

Ser Pro Thr Ala Phe Asn Ser Leu Ser Ser Leu Gln Val Leu Asn Met
485 490 495

Ser His Asn Asn Phe Phe Ser Leu Asp Thr Phe Pro Tyr Lys Cys Leu
 500 505 510

Asn Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Met Thr Ser
 515 520 525

Lys Lys Gln Glu Leu Gln Arg Phe Pro Ser Ser Leu Ala Phe Leu Asn
 530 535 540

Leu Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Glu Ser Phe Leu
 545 550 555 560

Gln Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Val Glu Arg Met
 565 570 575

Glu Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Leu
 580 585 590

Asn Ile Thr Cys Gln Met Asn Lys Thr Ile Ile Gly Val Ser Val Leu
 595 600 605

Ser Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr
 610 615 620

Phe His Leu Met Leu Leu Ala Gly Cys Met Lys Tyr Gly Arg Gly Glu
 625 630 635 640

Asn Thr Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp
 645 650 655

Val Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe
 660 665 670

Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Xaa Gly Val Ala Ile Ala
 675 680 685

Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val
 690 695 700

Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr
 705 710 715 720

Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser His Ala Gly Ile Ile
 725 730 735

Phe Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Gln Gln Val
 740 745 750

Glu Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp
 755 760 765

Ser Val Leu Gly Arg His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu
 770 775 780

Leu Asp Gly Lys Ser Trp Asn Pro Glu Gly Thr Val Gly Thr Gly Cys
 785 790 795 800

Asn

<210> 10
 <211> 2388
 <212> DNA
 <213> Macaca mulatta

<400> 10
 gtgggttccta atattactta tcaatgcatg gagctgaatt tctacaaaat ccccgacaac 60
 ctcccccttct caaccaagaa cctggacctg agctttaatc ccctgaggca tttaggcagc 120
 tatagcttct tcagtttccc agaactgcag gtgctygatt tatccagggtg tgaaatccag 180
 acaattgaag atggggcata tcagagccta agccacctct ccactttaat attgacagga 240
 aaccccatcc agagtttagc cctgggagcc ttttctggac tatcaagttt acagaagctg 300
 gtggctgtgg agacaaatct agcatctcta gagaacttcc ccattggaca tctcaaaact 360
 ttgaaagaac ttaatgtggc tcacaatctt atccagtctt tcaaattacc tgagtatttt 420
 tctaactctga ccaatctaga gcacttggac ctttccagta acaagattca aaatatttat 480
 tgcaaagact tgcaggttct acatcaaagc ccctatcca atctctcttt agacctgtcc 540
 ctgaacccta taaactttat ccaaccaggt gcattttaaag aaattaggct tcataagctg 600
 actttgagaa gtaattttga tgatttaaag gtaatgaaa cttgtattca aggtctggct 660
 ggtttagaag tccatcggtt ggttctggga gaatttagaa atgaaagaaa cttggaagag 720
 tttgacaaat cttctctgga gggattgtgc aatttgacca ttgaagaatt ccgattaaca 780
 tacttagact actacctga taatattatt gacttattta attgtttggc aaatgtttct 840
 tcattttccc tggtagtgt gagtattaaa agggtagaag acttttctta taatttcaga 900
 tggcaacatt tagaattagt taactgtaaa tttgaacagt tccccacatt ggaactcgaa 960

tctctcaaaa ggcttacttt cactgccaac aaaggtggga atgctttttc agaagttgat 1020

ctaccaagcc ttgagtttct agatctcagt agaaatggct tgagtttcaa aggttgctgt 1080

tctcaaagtg attttgggac aaccagccta aagtatttag atctgagctt caatgatgtt 1140

attaccatga gttcaaactt cttgggctta gaaaaactag aacatctgga tttccagcat 1200

tccaatttga aacagatgag tcaattttca gtattcctat cactcagaaa cctcattttac 1260

cttgacattt ctcatactca caccagagtt gctttcaatg gcatcttcga tggcttgctc 1320

agtctcaaag tcttaaaaat ggctggcaat tctttccagg aaaacttcct tccagatatc 1380

ttcacagatc tgaaaaactt gaccttctcg gacctctctc agtgtcaatt ggagcagttg 1440

tctccaacag catttgacac actcaacaag cttcaggtag taaatatgag ccacaacaac 1500

ttcttttcat tggatacggt tccttataag tgtctgccct ccctccaggt tctcgattac 1560

agtctcaatc acataatgac ttccaacaac caggaaactac agcattttcc aagtagtcta 1620

gctttcttaa atcttactca gaatgacttt gcttgtagtt gtgaacacca gagtttctcg 1680

cagtggatca aggaccagag gcagctcttg gtggaagctg aacgaatgga atgtgcaaca 1740

ccttcagata aacagggcat gccggtgctg agtttgaata ttacctgtca gatgaataag 1800

accatcattg gtgtgtctgt gttcagtggt cttgtggtat ctgttgtagc agttctggtc 1860

tataagttct attttcacct gatgcttctt gctggctgca taaastatgg tagagggtgaa 1920

aacatctatg atgcctttgt tatctactca agccaggatg aggactgggt aaggaatgaa 1980

ctagtaaaga atttagaaga aggggtgcct ccctttcagc tctgccttca ctacagagac 2040

tttattcccg gtgtggccat tgctgcaaac atcatccatg aaggtttcca taaaagccga 2100

aagggtgattg ttgtggtgtc ccagcacttc atccagagcc gctgggtgtat ctttgaatat 2160

gagattgctc agacctggca gtttctgagc agtcgtgcag gcataatctt cattgtcctg 2220

cagaaggtgg agaagaccct gctcaggcag cagggtggagc tgtaccgcct tctcagcagg 2280

aacacttacc tggagtggga ggacagtgtc ctggggcagc acatcttctg gagacgactc 2340

agaaaagccc tgttggtatgg cagatcgtgg aatccagaag aacagtag 2388

<210> 11
<211> 2388
<212> DNA
<213> Macaca mulatta

<220>
<221> CDS
<222> (1)..(2388)

<400> 11

gtg gtt cct aat att act tat caa tgc atg gag ctg aat ttc tac aaa	48
Val Val Pro Asn Ile Thr Tyr Gln Cys Met Glu Leu Asn Phe Tyr Lys	
1 5 10 15	
atc ccc gac aac ctc ccc ttc tca acc aag aac ctg gac ctg agc ttt	96
Ile Pro Asp Asn Leu Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe	
20 25 30	
aat ccc ctg agg cat tta ggc agc tat agc ttc ttc agt ttc cca gaa	144
Asn Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu	
35 40 45	
ctg cag gtg ctg gat tta tcc agg tgt gaa atc cag aca att gaa gat	192
Leu Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp	
50 55 60	
ggg gca tat cag agc cta agc cac ctc tcc act tta ata ttg aca gga	240
Gly Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly	
65 70 75 80	
aac ccc atc cag agt tta gcc ctg gga gcc ttt tct gga cta tca agt	288
Asn Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser	
85 90 95	
tta cag aag ctg gtg gct gtg gag aca aat cta gca tct cta gag aac	336
Leu Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn	
100 105 110	
ttc ccc att gga cat ctc aaa act ttg aaa gaa ctt aat gtg gct cac	384
Phe Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His	
115 120 125	
aat ctt atc cag tct ttc aaa tta cct gag tat ttt tct aat ctg acc	432
Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr	
130 135 140	
aat cta gag cac ttg gac ctt tcc agt aac aag att caa aat att tat	480
Asn Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Asn Ile Tyr	
145 150 155 160	
tgc aaa gac ttg cag gtt cta cat caa atg ccc cta tcc aat ctc tct	528
Cys Lys Asp Leu Gln Val Leu His Gln Met Pro Leu Ser Asn Leu Ser	
165 170 175	
tta gac ctg tcc ctg aac cct ata aac ttt atc caa cca ggt gca ttt	576
Leu Asp Leu Ser Leu Asn Pro Ile Asn Phe Ile Gln Pro Gly Ala Phe	
180 185 190	
aaa gaa att agg ctt cat aag ctg act ttg aga agt aat ttt gat gat	624
Lys Glu Ile Arg Leu His Lys Leu Thr Leu Arg Ser Asn Phe Asp Asp	
195 200 205	
tta aat gta atg aaa act tgt att caa ggt ctg gct ggt tta gaa gtc	672
Leu Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val	
210 215 220	
cat cgt ttg gtt ctg gga gaa ttt aga aat gaa aga aac ttg gaa gag	720
His Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Arg Asn Leu Glu Glu	
225 230 235 240	

ttt gac aaa tct tct ctg gag gga ttg tgc aat ttg acc att gaa gaa	768
Phe Asp Lys Ser Ser Leu Glu Gly Leu Cys Asn Leu Thr Ile Glu Glu	
245 250 255	
ttc cga tta aca tac tta gac tac tac ctc gat aat att att gac tta	816
Phe Arg Leu Thr Tyr Leu Asp Tyr Tyr Leu Asp Asn Ile Ile Asp Leu	
260 265 270	
ttt aat tgt ttg gca aat gtt tct tca ttt tcc ctg gtg agt gtg agt	864
Phe Asn Cys Leu Ala Asn Val Ser Ser Phe Ser Leu Val Ser Val Ser	
275 280 285	
att aaa agg gta gaa gac ttt tct tat aat ttc aga tgg caa cat tta	912
Ile Lys Arg Val Glu Asp Phe Ser Tyr Asn Phe Arg Trp Gln His Leu	
290 295 300	
gaa tta gtt aac tgt aaa ttt gaa cag ttt ccc aca ttg gaa ctc gaa	960
Glu Leu Val Asn Cys Lys Phe Glu Gln Phe Pro Thr Leu Glu Leu Glu	
305 310 315 320	
tct ctc aaa agg ctt act ttc act gcc aac aaa ggt ggg aat gct ttt	1008
Ser Leu Lys Arg Leu Thr Phe Thr Ala Asn Lys Gly Gly Asn Ala Phe	
325 330 335	
tca gaa gtt gat cta cca agc ctt gag ttt cta gat ctc agt aga aat	1056
Ser Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn	
340 345 350	
ggc ttg agt ttc aaa ggt tgc tgt tct caa agt gat ttt ggg aca acc	1104
Gly Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Thr	
355 360 365	
agc cta aag tat tta gat ctg agc ttc aat gat gtt att acc atg agt	1152
Ser Leu Lys Tyr Leu Asp Leu Ser Phe Asn Asp Val Ile Thr Met Ser	
370 375 380	
tca aac ttc ttg ggc tta gaa aaa cta gaa cat ctg gat ttc cag cat	1200
Ser Asn Phe Leu Gly Leu Glu Lys Leu Glu His Leu Asp Phe Gln His	
385 390 395 400	
tcc aat ttg aaa cag atg agt caa ttt tca gta ttc cta tca ctc aga	1248
Ser Asn Leu Lys Gln Met Ser Gln Phe Ser Val Phe Leu Ser Leu Arg	
405 410 415	
aac ctc att tac ctt gac att tct cat act cac acc aga gtt gct ttc	1296
Asn Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Arg Val Ala Phe	
420 425 430	
aat ggc atc ttc gat ggc ttg ctc agt ctc aaa gtc tta aaa atg gct	1344
Asn Gly Ile Phe Asp Gly Leu Leu Ser Leu Lys Val Leu Lys Met Ala	
435 440 445	
ggc aat tct ttc cag gaa aac ttc ctt cca gat atc ttc aca gat ctg	1392
Gly Asn Ser Phe Gln Glu Asn Phe Leu Pro Asp Ile Phe Thr Asp Leu	
450 455 460	
aaa aac ttg acc ttc ctg gac ctc tct cag tgt caa ttg gag cag ttg	1440
Lys Asn Leu Thr Phe Leu Asp Leu Ser Gln Cys Gln Leu Glu Gln Leu	
465 470 475 480	

tct cca aca gca ttt gac aca ctc aac aag ctt cag gta cta aat atg	1488
Ser Pro Thr Ala Phe Asp Thr Leu Asn Lys Leu Gln Val Leu Asn Met	
485 490 495	
agc cac aac aac ttc ttt tca ttg gat acg ttt cct tat aag tgt ctg	1536
Ser His Asn Asn Phe Phe Ser Leu Asp Thr Phe Pro Tyr Lys Cys Leu	
500 505 510	
ccc tcc ctc cag gtt ctc gat tac agt ctc aat cac ata atg act tcc	1584
Pro Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Met Thr Ser	
515 520 525	
aac aac cag gaa cta cag cat ttt cca agt agt cta gct ttc tta aat	1632
Asn Asn Gln Glu Leu Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn	
530 535 540	
ctt act cag aat gac ttt gct tgt act tgt gaa cac cag agt ttc ctg	1680
Leu Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Gln Ser Phe Leu	
545 550 555 560	
cag tgg atc aag gac cag agg cag ctc ttg gtg gaa gct gaa cga atg	1728
Gln Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Ala Glu Arg Met	
565 570 575	
gaa tgt gca aca cct tca gat aaa cag ggc atg ccg gtg ctg agt ttg	1776
Glu Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Leu	
580 585 590	
aat att acc tgt cag atg aat aag acc atc att ggt gtg tct gtg ttc	1824
Asn Ile Thr Cys Gln Met Asn Lys Thr Ile Ile Gly Val Ser Val Phe	
595 600 605	
agt gtg ctt gtg gta tct gtt gta gca gtt ctg gtc tat aag ttc tat	1872
Ser Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr	
610 615 620	
ttt cac ctg atg ctt ctt gct ggc tgc ata aas tat ggt aga ggt gaa	1920
Phe His Leu Met Leu Leu Ala Gly Cys Ile Xaa Tyr Gly Arg Gly Glu	
625 630 635 640	
aac atc tat gat gcc ttt gtt atc tac tca agc cag gat gag gac tgg	1968
Asn Ile Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp	
645 650 655	
gta agg aat gaa cta gta aag aat tta gaa gaa ggg gtg cct ccc ttt	2016
Val Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe	
660 665 670	
cag ctc tgc ctt cac tac aga gac ttt att ccc ggt gtg gcc att gct	2064
Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala	
675 680 685	
gca aac atc atc cat gaa ggt ttc cat aaa agc cga aag gtg att gtt	2112
Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val	
690 695 700	
gtg gtg tcc cag cac ttc atc cag agc cgc tgg tgt atc ttt gaa tat	2160
Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr	
705 710 715 720	

gag att gct cag acc tgg cag ttt ctg agc agt cgt gca ggc ata atc 2208
 Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile
 725 730 735

ttc att gtc ctg cag aag gtg gag aag acc ctg ctc agg cag cag gtg 2256
 Phe Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Gln Gln Val
 740 745 750

gag ctg tac cgc ctt ctc agc agg aac act tac ctg gag tgg gag gac 2304
 Glu Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp
 755 760 765

agt gtc ctg ggg cag cac atc ttc tgg aga cga ctc aga aaa gcc ctg 2352
 Ser Val Leu Gly Gln His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu
 770 775 780

ttg gat ggc aga tcg tgg aat cca gaa gaa cag tag 2388
 Leu Asp Gly Arg Ser Trp Asn Pro Glu Glu Gln
 785 790 795

<210> 12
 <211> 795
 <212> PRT
 <213> Macaca mulatta

<220>
 <221> misc_feature
 <222> (635)..(635)
 <223> The 'Xaa' at location 635 stands for Lys, or Asn.

<400> 12

Val Val Pro Asn Ile Thr Tyr Gln Cys Met Glu Leu Asn Phe Tyr Lys
 1 5 10 15

Ile Pro Asp Asn Leu Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe
 20 25 30

Asn Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu
 35 40 45

Leu Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp
 50 55 60

Gly Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly
 65 70 75 80

Asn Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser
 85 90 95

Leu Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn
 100 105 110

Phe Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His
 115 120 125

Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr
 130 135 140

Asn Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Asn Ile Tyr
 145 150 155 160

Cys Lys Asp Leu Gln Val Leu His Gln Met Pro Leu Ser Asn Leu Ser
 165 170 175

Leu Asp Leu Ser Leu Asn Pro Ile Asn Phe Ile Gln Pro Gly Ala Phe
 180 185 190

Lys Glu Ile Arg Leu His Lys Leu Thr Leu Arg Ser Asn Phe Asp Asp
 195 200 205

Leu Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val
 210 215 220

His Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Arg Asn Leu Glu Glu
 225 230 235 240

Phe Asp Lys Ser Ser Leu Glu Gly Leu Cys Asn Leu Thr Ile Glu Glu
 245 250 255

Phe Arg Leu Thr Tyr Leu Asp Tyr Tyr Leu Asp Asn Ile Ile Asp Leu
 260 265 270

Phe Asn Cys Leu Ala Asn Val Ser Ser Phe Ser Leu Val Ser Val Ser
 275 280 285

Ile Lys Arg Val Glu Asp Phe Ser Tyr Asn Phe Arg Trp Gln His Leu
 290 295 300

Glu Leu Val Asn Cys Lys Phe Glu Gln Phe Pro Thr Leu Glu Leu Glu
 305 310 315 320

Ser Leu Lys Arg Leu Thr Phe Thr Ala Asn Lys Gly Gly Asn Ala Phe
 325 330 335

Ser Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn
 340 345 350

Gly Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Thr
 355 360 365

Ser Leu Lys Tyr Leu Asp Leu Ser Phe Asn Asp Val Ile Thr Met Ser
 370 375 380

Ser Asn Phe Leu Gly Leu Glu Lys Leu Glu His Leu Asp Phe Gln His
 385 390 395 400

Ser Asn Leu Lys Gln Met Ser Gln Phe Ser Val Phe Leu Ser Leu Arg
 405 410 415

Asn Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Arg Val Ala Phe
 420 425 430

Asn Gly Ile Phe Asp Gly Leu Leu Ser Leu Lys Val Leu Lys Met Ala
 435 440 445

Gly Asn Ser Phe Gln Glu Asn Phe Leu Pro Asp Ile Phe Thr Asp Leu
 450 455 460

Lys Asn Leu Thr Phe Leu Asp Leu Ser Gln Cys Gln Leu Glu Gln Leu
 465 470 475 480

Ser Pro Thr Ala Phe Asp Thr Leu Asn Lys Leu Gln Val Leu Asn Met
 485 490 495

Ser His Asn Asn Phe Phe Ser Leu Asp Thr Phe Pro Tyr Lys Cys Leu
 500 505 510

Pro Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Met Thr Ser
 515 520 525

Asn Asn Gln Glu Leu Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn
 530 535 540

Leu Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Gln Ser Phe Leu
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Gln Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Ala Glu Arg Met
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Glu Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Leu
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Asn Ile Thr Cys Gln Met Asn Lys Thr Ile Ile Gly Val Ser Val Phe
 595 600 605

Ser Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr
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Phe His Leu Met Leu Leu Ala Gly Cys Ile Xaa Tyr Gly Arg Gly Glu
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Asn Ile Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp
 645 650 655

Val Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe
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Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala
 675 680 685

Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val
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Phe Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Gln Gln Val
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Glu Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp
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 Leu Ser Thr Leu Ile Leu Thr Gly Asn Pro Ile Gln Asn Leu Ala Leu
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 Gly Ala Phe Ser Gly Leu Ser Ser Leu Gln Lys Leu Val Ala Val Glu
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 aca cat ctg tta tcg cta gaa agc ttc ccc att gga cat ctc aaa act 192
 Thr His Leu Leu Ser Leu Glu Ser Phe Pro Ile Gly His Leu Lys Thr
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 Pro Glu Tyr Phe Ser Asn Leu Thr Asn Leu Glu His Leu Asp Leu Ser
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 caa atg ccc cta ctc aat ctc tct tta gac ctg tcc ctg aac cct ata 384
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 115 120 125

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Thr Leu Arg Asn Asn Phe Asp Ser Leu Asn Val Met Lys Thr Cys Ile	
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Phe Pro Asp Asp Ile Ile Asp Leu Phe Asn Cys Leu Val Asn Val Ser	
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Tyr Asn Phe Arg Trp Gln His Leu Glu Leu Val Asn Cys Ile Phe Gln	
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Gln Phe Pro Pro Leu Lys Leu Lys Ser Leu Lys Arg Leu Thr Phe Ser	
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Lys Asn Lys Gly Arg Asn His Phe Ala Glu Val Asp Leu Pro Ser Leu	
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Leu Ala Asp Ile Phe Thr Asp Leu Asn Asn Leu Ile Phe Leu Asp Leu	
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Ser Glu Cys Gln Leu Glu Gln Leu Ser Pro Thr Ala Phe Asp Ser Leu	
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Thr Cys Glu His Gln Ser Phe Leu Gln Trp Ile Lys Asp Gln Arg Arg	
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Cys Ile Lys Tyr Gly Arg Gly Glu Asn Thr Tyr Asp Ala Phe Val Ile	
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Tyr Ser Ser Gln Asp Glu Asp Trp Val Arg Asn Glu Leu Val Lys Asn	
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Leu Lys Asp Leu Asn Val Ala His Asn Leu Ile Gln Ser Phe Lys Leu
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 225 230 235 240

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Phe Ser Val Phe Leu Ser Leu Arg Asn Leu Ile Tyr Leu Asp Ile Ser
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Ser Leu Lys Val Leu Lys Met Ala Gly Asn Ser Phe Gln Gln Asn Phe
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Ser Glu Cys Gln Leu Glu Gln Leu Ser Pro Thr Ala Phe Asp Ser Leu
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Pro Arg Leu Gln Ile Leu Asn Met Ser His Asn Lys Phe Phe Ala Leu
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Asp Thr Phe Pro Tyr Lys His Leu Tyr Ser Leu His Val Leu Asp Tyr
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Pro Ser Ser Leu Ala Phe Leu Asn Leu Thr Gln Asn Asp Phe Ala Cys
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Thr Cys Glu His Gln Ser Phe Leu Gln Trp Ile Lys Asp Gln Arg Arg
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Leu Leu Val Glu Val Glu Arg Met Glu Cys Ala Thr Pro Leu Asn Arg
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Ala Val Leu Val Tyr Lys Phe Tyr Phe His Leu Met Leu Leu Ala Gly
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Cys Ile Lys Tyr Gly Arg Gly Glu Asn Thr Tyr Asp Ala Phe Val Ile
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Tyr Ser Ser Gln Asp Glu Asp Trp Val Arg Asn Glu Leu Val Lys Asn
 595 600 605

Leu Glu Glu Gly Val Pro Pro Phe Gln Leu Cys Leu His Tyr Arg Asp
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Phe Ile Pro Gly Val Ala Ile Ala Ala Asn Ile Ile His Glu Gly Phe
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His Lys Ser Arg Lys Val Ile Val Val Val Ser Gln His Phe Ile Gln
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Ser Arg Trp Cys Ile Phe Glu Tyr Glu Ile Ala Gln Thr Trp Gln Phe
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Lys Ser Leu Leu Arg Gln Gln Val Glu Leu Tyr Arg Leu Leu Ser Arg
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Asn Thr Tyr Leu Glu Trp Glu Asp Ser Val Leu Gly Arg His Ile Phe
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atc ccc gac aac atc ccc ttc tca act aag aac ctg gac ctg agc ttt 96
Ile Pro Asp Asn Ile Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe
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aac ccc ctg agg cat tta ggc agc cat agc ttc ttc aat ttc cca gaa 144
Asn Pro Leu Arg His Leu Gly Ser His Ser Phe Phe Asn Phe Pro Glu
35 40 45

ctg cag gtg ctg gat tta tcc agg tgt gac atc cag aca atc gaa gat 192
Leu Gln Val Leu Asp Leu Ser Arg Cys Asp Ile Gln Thr Ile Glu Asp
50 55 60

ggg gca tat cag agc cta agc cac ctc tcc acc tta ata ttg aca gga 240
Gly Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly
65 70 75 80

aat cct atc cag aat tta gcc ctg gga gcc ttt tct gga cta tca agt 288
Asn Pro Ile Gln Asn Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser
85 90 95

tta cag aag ctg gtg gct gtg gag aca cat ctg tta tca cta gag aac 336
Leu Gln Lys Leu Val Ala Val Glu Thr His Leu Leu Ser Leu Glu Asn

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100	105	110	
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aat cta gag cac ttg gac ctt tct agt aac aat att caa aat att tat Asn Leu Glu His Leu Asp Leu Ser Ser Asn Asn Ile Gln Asn Ile Tyr 145 150 155 160			480
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ttc cga tta gct tac tta gat gac ttt cta gat gat att att gac tta Phe Arg Leu Ala Tyr Leu Asp Asp Phe Leu Asp Asp Ile Ile Asp Leu 260 265 270			816
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Gly	Leu	Ser	Phe	Lys	Gly	Cys	Cys	Ser	Gln	Ser	Asp	Phe	Gly	Thr	Thr	
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Ser	Leu	Lys	Tyr	Leu	Asp	Leu	Ser	Phe	Asn	Asp	Val	Ile	Thr	Met	Gly	
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Asn	Leu	Ile	Tyr	Leu	Asp	Ile	Ser	His	Thr	His	Thr	Arg	Val	Ala	Phe	
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Asn	Gly	Ile	Phe	Asn	Gly	Leu	Phe	Ser	Leu	Lys	Val	Leu	Lys	Met	Ala	
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gga	aat	tct	ttc	cag	caa	aac	ttc	ctt	gaa	gat	atc	ttc	acr	gat	ctg	1392
Gly	Asn	Ser	Phe	Gln	Gln	Asn	Phe	Leu	Glu	Asp	Ile	Phe	Xaa	Asp	Leu	
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Asn	Asn	Leu	Ile	Phe	Leu	Asp	Leu	Ser	Glu	Cys	Gln	Leu	Glu	Gln	Leu	
465					470					475					480	
tct	cca	aca	gca	ttt	gac	tca	ctt	ccc	aga	ctt	cgg	ata	cta	aat	atg	1488
Ser	Pro	Thr	Ala	Phe	Asp	Ser	Leu	Pro	Arg	Leu	Arg	Ile	Leu	Asn	Met	
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agc	cac	aac	aac	ttc	ttt	gca	ttg	gat	aca	ttc	cct	tac	aag	cat	ctc	1536
Ser	His	Asn	Asn	Phe	Phe	Ala	Leu	Asp	Thr	Phe	Pro	Tyr	Lys	His	Leu	
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tac	tcc	ctc	cag	gtt	ctg	gat	tac	agt	ctc	aat	cat	ata	ggg	act	tcc	1584
Tyr	Ser	Leu	Gln	Val	Leu	Asp	Tyr	Ser	Leu	Asn	His	Ile	Gly	Thr	Ser	
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Lys	Asn	Gln	Glu	Leu	Gln	His	Phe	Pro	Ser	Ser	Leu	Ala	Phe	Leu	Asn	
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ctt	act	caa	aat	gac	ttt	gct	tgt	act	tgt	gaa	cac	cag	agt	ttc	ctg	1680
Leu	Thr	Gln	Asn	Asp	Phe	Ala	Cys	Thr	Cys	Glu	His	Gln	Ser	Phe	Leu	
545					550					555					560	
cag	tgg	atc	aag	gac	cag	agg	cgg	ctg	ttg	gtg	gaa	gtt	gaa	caa	atg	1728
Gln	Trp	Ile	Lys	Asp	Gln	Arg	Arg	Leu	Leu	Val	Glu	Val	Glu	Gln	Met	
				565				570						575		
gaa	tgt	gca	aca	cct	tta	aat	agg	aag	ggc	ata	cct	gtg	ctg	agt	ttg	1776
Glu	Cys	Ala	Thr	Pro	Leu	Asn	Arg	Lys	Gly	Ile	Pro	Val	Leu	Ser	Leu	

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Asn Ile Thr Cys Gln Met Ser Lys Thr Ile Ile Gly Val Ser Val Leu															
595 600 605															
agt gtg ctt gtg gta tct gtt gta gca gtt ctg gtc tat aag ttc tat	1872														
Ser Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr															
610 615 620															
ttt cac ctg atg ctt ctt gct ggc tgc ata aag tat ggt aga ggt gaa	1920														
Phe His Leu Met Leu Leu Ala Gly Cys Ile Lys Tyr Gly Arg Gly Glu															
625 630 635 640															
aac acc tat gat gcc ttt gtt atc tac tca agc cag gat gag gac tgg	1968														
Asn Thr Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp															
645 650 655															
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Val Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe															
660 665 670															
cag ctc tgc ctt cac tac aga gac ttt att ccc ggt gtg gcc att gct	2064														
Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala															
675 680 685															
gcc aac atc atc cat gaa ggt ttc cat aaa agc cga aag gtg att gtt	2112														
Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val															
690 695 700															
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Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr															
705 710 715 720															
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Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile															
725 730 735															
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Phe Ile Val Leu Gln Lys Val Glu Lys Ser Leu Leu Arg Gln Gln Val															
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Glu Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp															
755 760 765															
agt gtc ctg ggg agg cac atc ttc tgg aga cga ctc aga aaa gcc ctg	2352														
Ser Val Leu Gly Arg His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu															
770 775 780															
ctg gat ggt aga ccg tgg aat cca gaa gga aca gtg ggt gca gga tgc	2400														
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gaa tag	2406														
Glu															

<211> 801
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 <213> Saimiri sciureus

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 <222> (14)..(14)
 <223> The 'Xaa' at location 14 stands for Leu, or Phe.

<220>
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 <222> (462)..(462)
 <223> The 'Xaa' at location 462 stands for Thr.

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Ile Pro Asp Asn Ile Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe
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Asn Pro Leu Arg His Leu Gly Ser His Ser Phe Phe Asn Phe Pro Glu
 35 40 45

Leu Gln Val Leu Asp Leu Ser Arg Cys Asp Ile Gln Thr Ile Glu Asp
 50 55 60

Gly Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly
 65 70 75 80

Asn Pro Ile Gln Asn Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser
 85 90 95

Leu Gln Lys Leu Val Ala Val Glu Thr His Leu Leu Ser Leu Glu Asn
 100 105 110

Phe Pro Ile Gly His Leu Lys Thr Leu Lys Asp Leu Asn Val Ala His
 115 120 125

Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr
 130 135 140

Asn Leu Glu His Leu Asp Leu Ser Ser Asn Asn Ile Gln Asn Ile Tyr
 145 150 155 160

Cys Lys Asp Leu Gln Val Leu His Gln Met Pro Leu Leu Asn Leu Ser
 165 170 175

Leu Asp Leu Ser Leu Asn Pro Ile Asn Phe Ile Gln Pro Gly Ala Phe
 180 185 190

Lys Glu Ile Arg Leu His Lys Leu Thr Leu Arg Asn Asn Phe Asp Ser
 195 200 205

Leu Asn Ala Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val
 210 215 220

His Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Arg Asn Ile Glu Asp
 225 230 235 240

Phe Asp Lys Ser Ala Leu Glu Gly Leu Cys Asn Leu Thr Ile Asn Glu
 245 250 255

Phe Arg Leu Ala Tyr Leu Asp Asp Phe Leu Asp Asp Ile Ile Asp Leu
 260 265 270

Phe Asn Cys Leu Ala Asn Val Ser Ser Phe Ser Leu Val Asn Val His
 275 280 285

Ile Lys Arg Val Glu Asp Phe Ser Tyr Asn Phe Arg Trp Gln His Leu
 290 295 300

Glu Leu Val Asn Cys Val Phe Gln Gln Phe Pro Pro Leu Lys Leu Lys
 305 310 315 320

Ser Leu Lys Arg Leu Thr Phe Thr Ala Asn Lys Gly Arg Asn His Phe
 325 330 335

Ser Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn
 340 345 350

Gly Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Thr
 355 360 365

Ser Leu Lys Tyr Leu Asp Leu Ser Phe Asn Asp Val Ile Thr Met Gly
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Ser Asn Phe Leu Gly Leu Glu Gln Leu Glu His Leu Asp Phe Gln His
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Ser Asn Leu Lys Gln Met Ser Glu Phe Ser Val Phe Leu Ser Leu Arg
 405 410 415

Asn Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Arg Val Ala Phe
 420 425 430

Asn Gly Ile Phe Asn Gly Leu Phe Ser Leu Lys Val Leu Lys Met Ala
 435 440 445

Gly Asn Ser Phe Gln Gln Asn Phe Leu Glu Asp Ile Phe Xaa Asp Leu
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Asn Asn Leu Ile Phe Leu Asp Leu Ser Glu Cys Gln Leu Glu Gln Leu
 465 470 475 480

Ser Pro Thr Ala Phe Asp Ser Leu Pro Arg Leu Arg Ile Leu Asn Met
 485 490 495

Ser His Asn Asn Phe Phe Ala Leu Asp Thr Phe Pro Tyr Lys His Leu
 500 505 510

Tyr Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Gly Thr Ser
 515 520 525

Lys Asn Gln Glu Leu Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn
 530 535 540

Leu Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Gln Ser Phe Leu
 545 550 555 560

Gln Trp Ile Lys Asp Gln Arg Arg Leu Leu Val Glu Val Glu Gln Met
 565 570 575

Glu Cys Ala Thr Pro Leu Asn Arg Lys Gly Ile Pro Val Leu Ser Leu
 580 585 590

Asn Ile Thr Cys Gln Met Ser Lys Thr Ile Ile Gly Val Ser Val Leu
 595 600 605

Ser Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr
 610 615 620

Phe His Leu Met Leu Leu Ala Gly Cys Ile Lys Tyr Gly Arg Gly Glu
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Asn Thr Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp
 645 650 655

Val Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe
 660 665 670

Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala
 675 680 685

Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val
 690 695 700

Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr
 705 710 715 720

Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile
 725 730 735

Phe Ile Val Leu Gln Lys Val Glu Lys Ser Leu Leu Arg Gln Gln Val
 740 745 750

Glu Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp
 755 760 765

Ser Val Leu Gly Arg His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu
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Leu Asp Gly Arg Pro Trp Asn Pro Glu Gly Thr Val Gly Ala Gly Cys
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Glu

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 aacacttacc tggagtggga ggacagtgtc ctagggcagc acatcttctg gagacgactc 2340
 agaaaagccc tgttggtatgg cagatcgtgg aatccagaag aacagtag 2388

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 Ile Pro Asp Asn Ile Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe
 20 25 30
 aat ccc ctg agg cat tta ggc agc tat agc ttc ctc cgt ttt cca gaa 144
 Asn Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Leu Arg Phe Pro Glu
 35 40 45
 ctg cag gtg ctg gat tta tcc agg tgt gaa atc cag aca att gaa gat 192
 Leu Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp
 50 55 60
 ggg gca tat cag agc cta agc cac ctc tcc acc tta ata ttg aca gga 240
 Gly Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly
 65 70 75 80
 aac ccc atc cag agt tta gcc ctg gga gcc ttt tct gga cta tca agt 288
 Asn Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser
 85 90 95
 tta cag aag ctg gtg gct gtg gag aca aat cta gca tct cta gag aac 336
 Leu Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn
 100 105 110
 ttc ccc att gga cat ctc aaa act ttg aaa gaa ctt aat gtg gct cac 384
 Phe Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His
 115 120 125
 aat ctt atc cag tct ttc aaa tta cct gag tat ttt tct aat ctg acc 432
 Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr
 130 135 140
 aat cta gag cac ttg gac ctt tcc agt aac aag att caa aat att tat 480
 Asn Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Asn Ile Tyr
 145 150 155 160
 tgc aaa gac ttg cag gtt cta cat caa atg ccc cta ccc aat ctc tct 528
 Cys Lys Asp Leu Gln Val Leu His Gln Met Pro Leu Pro Asn Leu Ser

55

56

645										650					655					
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Gln	Leu	Cys	Leu	His	Tyr	Arg	Asp	Phe	Ile	Pro	Gly	Val	Ala	Ile	Ala					
		675					680					685								
gca	aac	atc	atc	cat	gaa	ggt	ttc	cat	aaa	agc	cga	aag	gtg	att	gtt		2112			
Ala	Asn	Ile	Ile	His	Glu	Gly	Phe	His	Lys	Ser	Arg	Lys	Val	Ile	Val					
		690					695				700									
gtg	gtg	tcc	cag	cac	ttc	atc	cag	agc	cgc	tgg	tgt	atc	ttt	gaa	tat		2160			
Val	Val	Ser	Gln	His	Phe	Ile	Gln	Ser	Arg	Trp	Cys	Ile	Phe	Glu	Tyr					
		705			710					715					720					
gag	att	gct	cag	acc	tgg	cag	ttt	ctg	agc	agt	cgt	gca	ggc	ata	atc		2208			
Glu	Ile	Ala	Gln	Thr	Trp	Gln	Phe	Leu	Ser	Ser	Arg	Ala	Gly	Ile	Ile					
				725					730					735						
ttc	att	gtc	ctg	cag	aag	gtg	gag	aag	acc	ctg	ctc	agg	cag	cag	gtg		2256			
Phe	Ile	Val	Leu	Gln	Lys	Val	Glu	Lys	Thr	Leu	Leu	Arg	Gln	Gln	Val					
			740					745					750							
gag	ctg	tac	cgc	ctt	ctc	agc	agg	aac	act	tac	ctg	gag	tgg	gag	gac		2304			
Glu	Leu	Tyr	Arg	Leu	Leu	Ser	Arg	Asn	Thr	Tyr	Leu	Glu	Trp	Glu	Asp					
		755					760					765								
agt	gtc	cta	ggg	cag	cac	atc	ttc	tgg	aga	cga	ctc	aga	aaa	gcc	ctg		2352			
Ser	Val	Leu	Gly	Gln	His	Ile	Phe	Trp	Arg	Arg	Leu	Arg	Lys	Ala	Leu					
		770				775					780									
ttg	gat	ggc	aga	tcg	tgg	aat	cca	gaa	gaa	cag	tag						2388			
Leu	Asp	Gly	Arg	Ser	Trp	Asn	Pro	Glu	Glu	Gln										
		785			790					795										

<210> 21
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 <212> PRT
 <213> Papio hamadryas

<400> 21

Val	Val	Pro	Asn	Ile	Thr	Tyr	Gln	Cys	Met	Glu	Leu	Asn	Phe	Tyr	Lys
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Ile	Pro	Asp	Asn	Ile	Pro	Phe	Ser	Thr	Lys	Asn	Leu	Asp	Leu	Ser	Phe
		20						25					30		

Asn	Pro	Leu	Arg	His	Leu	Gly	Ser	Tyr	Ser	Phe	Leu	Arg	Phe	Pro	Glu
		35					40					45			

Leu	Gln	Val	Leu	Asp	Leu	Ser	Arg	Cys	Glu	Ile	Gln	Thr	Ile	Glu	Asp
	50					55					60				

Gly Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly
65 70 75 80

Asn Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser
85 90 95

Leu Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn
100 105 110

Phe Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His
115 120 125

Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr
130 135 140

Asn Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Asn Ile Tyr
145 150 155 160

Cys Lys Asp Leu Gln Val Leu His Gln Met Pro Leu Pro Asn Leu Ser
165 170 175

Leu Asp Leu Ser Leu Asn Pro Ile Asn Phe Ile Gln Pro Gly Ala Phe
180 185 190

Lys Glu Ile Arg Leu His Lys Leu Thr Leu Arg Ser Asn Phe Asp Asp
195 200 205

Leu Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val
210 215 220

His Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Arg Asn Leu Glu Glu
225 230 235 240

Phe Asp Lys Ser Ala Leu Glu Gly Leu Cys Asn Leu Thr Ile Glu Glu
245 250 255

Phe Arg Leu Thr Tyr Leu Asp Tyr Tyr Leu Asp Asn Ile Ile Asp Leu
260 265 270

Phe Asn Cys Leu Ala Asn Ala Ser Ser Phe Ser Leu Val Ser Val Asn
275 280 285

Ile Lys Arg Val Glu Asp Phe Ser Tyr Asn Phe Arg Trp Gln His Leu
290 295 300

Glu Leu Val Asn Cys Lys Phe Glu Gln Phe Pro Thr Leu Glu Leu Glu
 305 310 315 320

Ser Leu Lys Arg Leu Thr Phe Thr Ala Asn Lys Gly Gly Asn Ala Phe
 325 330 335

Ser Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn
 340 345 350

Gly Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Thr
 355 360 365

Ser Leu Lys Tyr Leu Asp Leu Ser Phe Asn Asp Val Ile Thr Met Gly
 370 375 380

Ser Asn Phe Leu Gly Leu Glu Gln Leu Glu His Leu Asp Phe Gln His
 385 390 395 400

Ser Asn Leu Lys Gln Met Ser Gln Phe Ser Val Phe Leu Ser Leu Arg
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Asn Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Thr Val Ala Phe
 420 425 430

Asn Gly Ile Phe Asp Gly Leu Leu Ser Leu Lys Val Leu Lys Met Ala
 435 440 445

Gly Asn Ser Phe Gln Glu Asn Phe Leu Pro Asp Ile Phe Thr Asp Leu
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Lys Asn Leu Thr Phe Leu Asp Leu Ser Gln Cys Gln Leu Glu Gln Leu
 465 470 475 480

Ser Pro Thr Ala Phe Asp Thr Leu Asn Lys Leu Gln Val Leu Asn Met
 485 490 495

Ser His Asn Asn Phe Phe Ser Leu Asp Val Phe Pro Tyr Lys Cys Leu
 500 505 510

Pro Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Met Thr Ser
 515 520 525

Lys Asn Gln Glu Pro Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn
 530 535 540

Leu Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Gln Ser Phe Leu
 545 550 555 560

Gln Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Ala Glu Arg Met
 565 570 575

Glu Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Val
 580 585 590

Asn Ile Thr Cys Gln Met Asn Lys Thr Ile Ile Gly Val Ser Val Phe
 595 600 605

Ser Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr
 610 615 620

Phe His Leu Met Leu Leu Ala Gly Cys Ile Lys Tyr Gly Arg Gly Glu
 625 630 635 640

Asn Ile Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp
 645 650 655

Val Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe
 660 665 670

Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala
 675 680 685

Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val
 690 695 700

Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr
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Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile
 725 730 735

Phe Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Gln Gln Val
 740 745 750

Glu Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp
 755 760 765

Ser Val Leu Gly Gln His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu
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Leu Asp Gly Arg Ser Trp Asn Pro Glu Glu Gln
 785 790 795

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 <211> 2427
 <212> DNA
 <213> Pan troglodytes

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<210> 23
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 <212> DNA
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atc ccc gac aac ctc ccc ttc tca acc aag aac ctg gac ctg agc ttt 96
Ile Pro Asp Asn Leu Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe
20 25 30

aat ccc ctg agg cat tta ggc agc tat agc ttc ttc agt ttc cca gaa 144
Asn Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu
35 40 45

ctg cag gtg ctg gat tta tcc agg tgt gaa atc cag aca att gaa gat 192
Leu Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp

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50	55	60	
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tta cag aag ctg gtg gct gtg gag aca aat cta gca tct cta gag aac Leu Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn 100 105 110			336
ttc ccc att gga cat ctc aaa act ttg aaa gaa ctt aat gtg gct cac Phe Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His 115 120 125			384
aat ctt atc caa tct ttc aaa tta cct gag tat ttt tct aat ctg acc Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr 130 135 140			432
aat cta gag cac ttg gac ctt tcc agc aac aag att caa agt att tat Asn Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Ser Ile Tyr 145 150 155 160			480
tgc aca gac ttg cgg gtt cta cat caa atg ccc cta ctc aat ctc tct Cys Thr Asp Leu Arg Val Leu His Gln Met Pro Leu Leu Asn Leu Ser 165 170 175			528
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tta aat gta atg aaa act tgt att caa ggt ctg gct ggt tta gaa gtc Leu Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val 210 215 220			672
cat cgt ttg gtt ctg gga gaa ttt aga aat gaa gaa aac ttg gaa aag His Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Glu Asn Leu Glu Lys 225 230 235 240			720
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ttc cga tta gca tac tta gac tac tac ctc gat gat att att gac tta Phe Arg Leu Ala Tyr Leu Asp Tyr Tyr Leu Asp Asp Ile Ile Asp Leu 260 265 270			816
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att aaa agc gta aaa gac ttt tct tat aat ttc gga tgg caa cat tta Ile Lys Ser Val Lys Asp Phe Ser Tyr Asn Phe Gly Trp Gln His Leu 290 295 300			912

290	295	300	
gaa tta gtt aag tgt aaa ttt gga cag ttt ccc aca ttg aaa ctc aaa			960
Glu Leu Val Lys Cys Lys Phe Gly Gln Phe Pro Thr Leu Lys Leu Lys			
305	310	315	320
tct ctc aaa agg ctt act ttc act tcc aac aaa ggt ggg aat gct ttt			1008
Ser Leu Lys Arg Leu Thr Phe Thr Ser Asn Lys Gly Gly Asn Ala Phe			
	325	330	335
tca gaa gtt gat cta cca agc ctt gag ttt cta gat ctc agt aga aat			1056
Ser Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn			
	340	345	350
ggc ttg agt ttc aaa ggt tgc tgt tct caa agt gat ttt ggg aca acc			1104
Gly Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Thr			
	355	360	365
agc cta aag tat tta gat ctg agc ttc aat ggt gtt att acc atg agt			1152
Ser Leu Lys Tyr Leu Asp Leu Ser Phe Asn Gly Val Ile Thr Met Ser			
	370	375	380
tca aac ttc ttg ggc tta gaa caa cta gaa cat ctg gat ttc cag cat			1200
Ser Asn Phe Leu Gly Leu Glu Gln Leu Glu His Leu Asp Phe Gln His			
	385	390	400
tcc aat ttg aaa caa atg agt gag ttt tca gta ttc cta tca ctc aga			1248
Ser Asn Leu Lys Gln Met Ser Glu Phe Ser Val Phe Leu Ser Leu Arg			
	405	410	415
aac ctc att tac ctt gac att tct cat act cac acc aga gtt gct ttc			1296
Asn Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Arg Val Ala Phe			
	420	425	430
aat ggc atc ttc aat ggc ttg tcc agt ctc gaa gtc ttg aaa atg gct			1344
Asn Gly Ile Phe Asn Gly Leu Ser Ser Leu Glu Val Leu Lys Met Ala			
	435	440	445
ggc aat tct ttc cag gaa aac ttc ctt cca gat atc ttc aca gag ctg			1392
Gly Asn Ser Phe Gln Glu Asn Phe Leu Pro Asp Ile Phe Thr Glu Leu			
	450	455	460
aga aac ttg acc ttc ctg gac ctc tct cag tgt caa ctg gag cag ttg			1440
Arg Asn Leu Thr Phe Leu Asp Leu Ser Gln Cys Gln Leu Glu Gln Leu			
	465	470	475
tct cca aca gca ttt aac tca ctc tcc agt ctt cag gta cta aat atg			1488
Ser Pro Thr Ala Phe Asn Ser Leu Ser Ser Leu Gln Val Leu Asn Met			
	485	490	495
agc cac aac aac ttc ttt tca ttg gat acg ttt cct tat aag tgt ctg			1536
Ser His Asn Asn Phe Phe Ser Leu Asp Thr Phe Pro Tyr Lys Cys Leu			
	500	505	510
aac tcc ctc cag gtt ctt gat tac agt ctc aat cac ata atg act tcc			1584
Asn Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Met Thr Ser			
	515	520	525
aaa aaa cag gaa cta cag cat ttt cca agt agt cta gct ttc tta aat			1632
Lys Lys Gln Glu Leu Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn			

530	535	540	
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caa tgg atc aag gac cag agg cag ctc ttg gtg gaa gtt gaa cga atg Gln Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Val Glu Arg Met 565 570 575			1728
gaa tgt gca aca cct tca gat aag cag ggc atg cct gtg ctg agt ttg Glu Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Leu 580 585 590			1776
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gtg gtg tcc cag cac ttc atc cag agc cgc tgg tgt atc ttt gaa tat Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr 705 710 715 720			2160
gag att gct cag acg tgg cag ttt ctg agc agt cgt gct ggt atc atc Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile 725 730 735			2208
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770 775 780

ctg gat ggt aaa tca tgg aat cca gaa gga aca gtg ggt aca gga tgc 2400
 Leu Asp Gly Lys Ser Trp Asn Pro Glu Gly Thr Val Gly Thr Gly Cys
 785 790 795 800

aat tgg cag gaa gca aca tct atc tga 2427
 Asn Trp Gln Glu Ala Thr Ser Ile
 805

<210> 24
 <211> 808
 <212> PRT
 <213> Pan troglodytes

<220>
 <221> misc_feature
 <222> (758)..(758)
 <223> The 'Xaa' at location 758 stands for Leu.

<400> 24

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Ile Pro Asp Asn Leu Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe
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Asn Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu
 35 40 45

Leu Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp
 50 55 60

Gly Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly
 65 70 75 80

Asn Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser
 85 90 95

Leu Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn
 100 105 110

Phe Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His
 115 120 125

Asn Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr
 130 135 140

Asn Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Ser Ile Tyr

145		150		155		160
Cys Thr Asp Leu Arg Val Leu His Gln Met Pro Leu Leu Asn Leu Ser						
		165		170		175
Leu Asp Leu Ser Leu Asn Pro Met Asn Phe Ile Gln Pro Gly Ala Phe						
		180		185		190
Lys Glu Ile Arg Leu His Lys Leu Thr Leu Arg Asn Asn Phe Asp Ser						
		195		200		205
Leu Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val						
		210		215		220
His Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Glu Asn Leu Glu Lys						
		225		230		235
Phe Asp Lys Ser Ala Leu Glu Gly Leu Cys Asn Leu Thr Ile Glu Glu						
		245		250		255
Phe Arg Leu Ala Tyr Leu Asp Tyr Tyr Leu Asp Asp Ile Ile Asp Leu						
		260		265		270
Phe Asn Cys Leu Thr Asn Val Ser Ser Phe Ser Leu Val Ser Val Thr						
		275		280		285
Ile Lys Ser Val Lys Asp Phe Ser Tyr Asn Phe Gly Trp Gln His Leu						
		290		295		300
Glu Leu Val Lys Cys Lys Phe Gly Gln Phe Pro Thr Leu Lys Leu Lys						
		305		310		315
Ser Leu Lys Arg Leu Thr Phe Thr Ser Asn Lys Gly Gly Asn Ala Phe						
		325		330		335
Ser Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn						
		340		345		350
Gly Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Thr						
		355		360		365
Ser Leu Lys Tyr Leu Asp Leu Ser Phe Asn Gly Val Ile Thr Met Ser						
		370		375		380
Ser Asn Phe Leu Gly Leu Glu Gln Leu Glu His Leu Asp Phe Gln His						

385 390 395 400
 Ser Asn Leu Lys Gln Met Ser Glu Phe Ser Val Phe Leu Ser Leu Arg
 405 410 415
 Asn Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Arg Val Ala Phe
 420 425 430
 Asn Gly Ile Phe Asn Gly Leu Ser Ser Leu Glu Val Leu Lys Met Ala
 435 440 445
 Gly Asn Ser Phe Gln Glu Asn Phe Leu Pro Asp Ile Phe Thr Glu Leu
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 Arg Asn Leu Thr Phe Leu Asp Leu Ser Gln Cys Gln Leu Glu Gln Leu
 465 470 475 480
 Ser Pro Thr Ala Phe Asn Ser Leu Ser Ser Leu Gln Val Leu Asn Met
 485 490 495
 Ser His Asn Asn Phe Phe Ser Leu Asp Thr Phe Pro Tyr Lys Cys Leu
 500 505 510
 Asn Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Met Thr Ser
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 Lys Lys Gln Glu Leu Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn
 530 535 540
 Leu Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Gln Ser Phe Leu
 545 550 555 560
 Gln Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Val Glu Arg Met
 565 570 575
 Glu Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Leu
 580 585 590
 Asn Ile Thr Cys Gln Met Asn Lys Thr Ile Ile Gly Val Ser Val Leu
 595 600 605
 Ser Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr
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 Phe His Leu Met Leu Leu Ala Gly Cys Ile Lys Tyr Gly Arg Gly Glu

625 630 635 640
 Asn Ile Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp
 645 650 655
 Val Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe
 660 665 670
 Gln Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala
 675 680 685
 Ala Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val
 690 695 700
 Val Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr
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 Glu Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile
 725 730 735
 Phe Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Arg Gln Val
 740 745 750
 Glu Leu Tyr Arg Leu Xaa Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp
 755 760 765
 Ser Val Leu Gly Arg His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu
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Lys Ile Ser Leu
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